CLAIM AMENDMENTS

1-14 (Canceled)

15. (Currently Amended) A biocompatible gripping device for surgical use, the device comprising:

gripping means having at least one deformable gripping element, said deformable gripping element being deformable from a non-deformed condition to a deformed condition on gripping an article, ~~wherein~~

the deformable gripping element ~~can be returned~~ remaining in its deformed condition on releasing the article, wherein said gripping element requires that it be heated to return to its non-deformed condition ~~on heating~~ after releasing the article, and

the gripping element comprising a shape memory material, wherein the shape memory material comprises functional porosity sufficient to allow compression of the gripping element upon squeezing the gripping element around the article.

16. (Previously Presented) A biocompatible gripping device according to claim 15 wherein the deformable gripping element can return to the non-deformed condition on heating to a temperature of between 50°C and 100°C.

17. (Previously Presented) A biocompatible gripping device according to claim 15 wherein the shape memory material comprises a shape memory alloy.

18. (Previously Presented) A biocompatible gripping device according to claim 17 wherein the shape memory alloy is a nominally equitomic alloy.

19. (Previously Presented) A biocompatible gripping device according to claim 18 wherein the shape memory alloy is a titanium-nickel alloy.

20. (Previously Presented) A biocompatible gripping device according to claim 19 wherein the shape memory alloy is a titanium nickel alloy having substantially 52 atomic % titanium and substantially 48 atomic % nickel.

21. (Previously Presented) A biocompatible gripping device according to claim 20 wherein the deformable gripping element is applied to the gripping means by brazing, soldering, riveting, sintering or compression fit.

22. (Previously Presented) A biocompatible gripping device according to claim 15 wherein the deformable gripping element is selected from a coating and an insert.

23. (Previously Presented) A biocompatible gripping device according to claim 15 wherein the device comprises a pair of co-operating gripping members, each of which includes a gripping surface whereby at least one of said surfaces is provided by said deformable gripping element.

24. (Previously Presented) A biocompatible gripping device according to claim 23 wherein each of said gripping surfaces is provided by a respective one of said deformable gripping elements.

25. (Previously Presented) A biocompatible gripping device according to claim 23 in the form of a surgical needle holder or forceps.

26. (Currently Amended) A biocompatible gripping device for surgical use, the device comprising:

gripping means having at least one deformable gripping element, said element being deformable from a non-deformed condition to a deformed condition on gripping an article,

the deformable gripping element remaining in its deformed condition on releasing the article, wherein said gripping element requires that it be heated to return to its non-deformed condition after releasing the article,

the gripping element comprising nitinol as a shape memory material, and

the nitinol comprising functional porosity, wherein said functional porosity provides a recoverable shape memory deformation of substantially 50%.

27. (Previously Presented) A biocompatible gripping device according to claim 26 wherein the deformable gripping element is deformable on gripping an article and can be returned to a non-deformed condition after releasing the article.

28. (Previously Presented) A biocompatible gripping device according to claim 27 wherein the deformable gripping element can be returned to its non-deformed condition on heating.

29. (Previously Presented) A biocompatible gripping device according to claim 28 wherein the deformable gripping element can return to the non-deformed condition on heating to a temperature of between 50°C and 100°C.

30. (Previously Presented) A biocompatible gripping device according to claim 26 wherein the shape memory alloy is a nominally equitomic alloy.

31. (Previously Presented) A biocompatible gripping device according to claim 30 wherein the shape memory alloy is a titanium nickel alloy having substantially 52 atomic % titanium and substantially 48 atomic % nickel.

32. (Previously Presented) A biocompatible gripping device according to claim 31 wherein the deformable gripping element is

applied to the gripping means by brazing, soldering, riveting, sintering or compression fit.

33. (Previously Presented) A biocompatible gripping device according to claim 26 wherein the deformable gripping element is selected from a coating and an insert.

34. (Previously Presented) A biocompatible gripping device according to claim 26 wherein the device comprises a pair of co-operating gripping members, each of which includes a gripping surface whereby at least one of said surfaces is provided by said deformable gripping element.

35. (Previously Presented) A biocompatible gripping device according to claim 34 wherein each of said gripping surfaces is provided by a respective one of said deformable gripping elements.

36. (Previously Presented) A biocompatible gripping device according to claim 34 in the form of a surgical needle holder or forceps.

37. (Currently Amended) A biocompatible gripping device for surgical use, the device comprising:

gripping means having at least one deformable gripping element, said element being deformable from a non-deformed condition to a deformed condition on gripping an article,

the deformable gripping element remaining in its deformed condition on releasing the article, wherein said gripping element requires that it be heated to return to its non-deformed condition after releasing the article,

the gripping element comprising nitinol as a shape memory material, and

the nitinol comprising functional porosity, wherein the nitinol is formed by sintering a mixture of pure nickel and titanium powders in an inert atmosphere.

38. (Previously Presented) A biocompatible gripping device according to claim 37 wherein the deformable gripping element is deformable on gripping an article and can be returned to a non-deformed condition after releasing the article.

39. (Previously Presented) A biocompatible gripping device according claim 38 wherein the deformable gripping element can be returned to its non-deformed condition on heating.

40. (Previously Presented) A biocompatible gripping device according to claim 39 wherein the deformable gripping element can return to the non-deformed condition on heating to a temperature of between 50°C and 100°C.

41. (Previously Presented) A biocompatible gripping device according to claim 37 wherein the shape memory alloy is a nominally equitomic alloy.

42. (Previously Presented) A biocompatible gripping device according to claim 41 wherein the shape memory alloy is a titanium nickel alloy having substantially 52 atomic % titanium and substantially 48 atomic % nickel.

43. (Previously Presented) A biocompatible gripping device according to claim 42 wherein the deformable gripping element is applied to the gripping means by brazing, soldering, riveting, sintering or compression fit.

44. (Previously Presented) A biocompatible gripping device according to claim 37 wherein the deformable gripping element is selected from a coating and an insert.

45. (Previously Presented) A biocompatible gripping device according to claim 37 wherein the device comprises a pair of co-operating gripping members, each of which includes a gripping surface whereby at least one of said surfaces is provided by said deformable gripping element.

46. (Previously Presented) A biocompatible gripping device according to claim 45 wherein each of said gripping surfaces Is provided by a respective one of said deformable gripping elements.

47. (Previously Presented) A biocompatible gripping device according to claim 45 in the form of a surgical needle holder or forceps.

48. (Withdrawn) A method of manufacturing a biocompatible gripping device for surgical use, the device comprising gripping means, wherein the method comprises mixing pure nickel and titanium powders, sintering said powders in an inert atmosphere, forming a gripping element from said sintered powders, and arranging the gripping element as part of the gripping means.

A1 Cont

49. (Withdrawn) A method according to claim 48 wherein the nickel and titanium powders are mixed in an approximate ratio of 50 atomic % nickel to 50 atomic % titanium.

50. (Withdrawn) A method according to claim 48 wherein the nickel and titanium powders are mixed in a ration of 52 atomic % titanium and 48 atomic % nickel.

51. (Withdrawn) A method according to claim 48 wherein the step of sintering the mixed powders is carried out in an argon atmosphere.

52. (Withdrawn) A method according to claim 48 wherein the mixed powders are cold compacted prior to the sintering step.